



WRITTEN TESTIMONY

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VICE PRESIDENT OF CORPORATE STRATEGY & SUSTAINABILITY  
WAL-MART STORES, INC.  
BENTONVILLE, ARKANSAS

*"CLIMATE CHANGE: UNDERSTANDING THE DEGREE OF THE PROBLEM"*

BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES  
COMMITTEE ON GOVERNMENT REFORM

THURSDAY, JULY 20, 2006

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Chairman Davis, Ranking Member Waxman and distinguished members of the Committee:

Wal-Mart Stores, Inc. appreciates the opportunity to provide testimony on this important issue. We know that being an efficient and profitable business and being a good steward of the environment are goals that can work together. At Wal-Mart, from our CEO, H. Lee Scott Jr. and down, we are passionate about making Wal-Mart a more environmentally-friendly company and we believe that greenhouse gases can be cost-effectively reduced throughout the economy.

Today, we will discuss the various initiatives Wal-Mart has undertaken that highlight our commitment to sustainability. Our efforts include a number of initiatives to make Wal-Mart more environmentally-friendly. Further, these efforts have the added bonus of making us more efficient. We believe we can work together with suppliers, academics, NGO's, politicians and other business leaders to do the right thing.

Sustainability is not a one-time program for Wal-Mart. Environmentally-friendly efforts are now an integral part of the Wal-Mart culture. We are prepared to work with you to improve environmental sustainability within the United States and throughout the world.

**Background**

My name is Andrew Ruben. I am Vice President of Corporate Strategy & Sustainability for Wal-Mart Stores, Inc.'s worldwide operations. This position was established in the summer of 2005 as part of Wal-Mart's drive to incorporate social and environmental sustainability into its business strategies. My office is responsible for business sustainability initiatives worldwide.

I began my career with Wal-Mart in 2002 as Director of Corporate Strategy. I became Vice President of U.S. Strategies in 2003. In those roles, I gained familiarity across a wide range of Wal-Mart's businesses and markets. Before joining Wal-Mart, I was a consultant with Cap Gemini Ernst & Young's Strategy Practice, where I helped develop growth and planning strategies for dozens of Fortune 500 companies.

Based in Bentonville, Arkansas, Wal-Mart is the world's largest retailer. The company employs more than 1.8 million associates worldwide. Each week more than 176 million customers visit Wal-Mart stores worldwide, which we believe reflects the success of our commitment to providing Everyday Low Prices to our customers. Beyond operating stores,

clubs and distribution centers, Wal-Mart takes a proactive role in various issues impacting the communities within which it operates.

## Overview

As the largest retail company in the world, the largest private consumer of electricity in the United States, and the owner of one of the largest private heavy-duty truck fleets in the country, we recognize our ability to significantly affect the environment. We know we can contribute while also providing leadership in ways to restore the life support systems of the earth. As such, Wal-Mart is particularly interested in the issue of climate change. We believe this restorative responsibility provides an opportunity to promote innovative business practices across our entire industry.

Last year, our President and CEO, H. Lee Scott, Jr., announced an initiative for Wal-Mart making sustainability a key part of its corporate mission. CEO Scott stated the following simple and straightforward environmental goals:

- To be supplied 100 percent by renewable energy.
- To create zero waste.
- To sell products that sustain our resources and environment.

Additionally, he has made it clear to us at Wal-Mart that human action contributes to global warming and that we at Wal-Mart must reduce greenhouse gases. He previously stated “I had embraced this idea that the world’s climate is changing and that man played a part in that, and that Wal-Mart can play a part in reducing man’s impact.” Mr. Scott has also stated that, “We are looking at innovative ways to reduce our greenhouse gas emissions. This used to be controversial, but the science is in and it is overwhelming. Climate change doesn’t cause hurricanes, but hot ocean water makes them more powerful. Climate change doesn’t cause rainfall, but it can increase the frequency and severity of heavy flooding. Climate change doesn’t cause droughts, but it makes droughts longer. We believe every company has a responsibility to reduce greenhouse gases as quickly as it can.”

As a participant on behalf on Wal-Mart in the Senate Energy and Natural Resources Committee’s conference on climate change this past April, I stated that Wal-Mart believes that the U.S. should provide strong leadership on climate change, with the help of companies like Wal-Mart, while serving the interests of U.S. consumers. As part of that testimony we made clear that Wal-Mart would accept a well-designed mandatory cap and trade system for greenhouse gases.

These statements and actions are proof that we at Wal-Mart believe sustainability may well be the most important initiative we undertake at Wal-Mart this decade, maybe even this century. It will have a huge impact on the way things are made, farmed, packaged, transported, displayed and sold worldwide. To this end, we have been taking and will continue to take steps to improve Wal-Mart’s carbon footprint. Some of the actions we have taken and goals we have set include:

- We will eliminate 30 percent of the energy used by our stores. We have already taken steps to meet this goal by installing more efficient lighting and retrofitting refrigerators.

- New store prototypes in the works will use design and technology to be 30 percent more efficient than today's stores and in the longer term even 50 percent more efficient.
- We have set a corporate goal of eventually being fueled 100 percent by renewable energy.
- We will eliminate 25 percent of the solid waste from U.S. stores in the next three years as we approach our corporate goal of producing zero waste.
- We will increase the efficiency of our truck fleet by 25 percent over the next three years and we will double our efficiency within 10 years.
- We have cut the company's fuel use by 8 percent by implementing a new policy in our truck fleet. We have equipped 7,200 tractor trailer units with Auxiliary Power Units that will be used to power truck cabs during rest periods. This saves 10 million gallons of diesel fuel and prevents 100,000 metric tons of CO<sub>2</sub> from entering the atmosphere.
- We have had hybrid vehicles in our corporate fleet since June of 2003. In 2005, we increased our use of hybrid vehicles to 100, with plans to add at least 100 more per year to the 4,000 car fleet.
- Except in the North, we utilize white reflective roof membranes, resulting in a 10 percent lower cooling load.

The environmental advantages of Wal-Mart's actions come straight from our size. We are in thousands of communities around the United States and 15 other countries. We buy products from more than 60,000 suppliers in 70 countries. We sell anywhere from 35,000 to 100,000 product lines in each of our 6,000-plus stores and clubs. Our size enables us to help create markets for clean technologies that exist today, but do not yet have fully established markets. If Wal-Mart started using or selling those items all of a sudden, there would be enough scale that those would be viable alternatives.

Our size and scale means that even one small pro-environment change in our policies or our customers' habits has exponential impacts all over the world. This is best understood with a concrete example. By reducing the size of the cardboard packaging on just one line of our own-brand toys last summer, we saved over 5,000 trees and 1,300 barrels of oil that would have gone into making the packaging. We also reduced the amount of fuel needed to transport those products to our stores which generated a freight savings of more than \$2.4 million a year.

## **The Challenge**

What we are learning about our footprint on the environment is both concerning and inspiring. Despite our excellence in efficiency, commerce creates a lot of waste. Fortunately, we have identified many opportunities to transform our entire industry. While we are experimenting and innovating in many areas, we will not lose focus of our goals of maximizing energy effectiveness, reducing waste, and promoting environmentally preferable products.

At Wal-Mart, that which gets measured gets managed. Our teams are developing sets of common sense metrics that hold us accountable for the goals we are setting. We look forward to sharing what we learn with others so that we may all continue to work together towards preserving and improving our environment.

Already, we are sharing technology and encouraging innovations with our supplier partners to help them optimize their systems and reduce packaging. Together we are

discovering that these innovations help their bottom line. The advantages of sustainability are synergistic.

### **Wal-Mart's Sustainable Energy Initiatives in Detail**

As significant consumers of energy worldwide, we are committed to doing our part. Through deep investments and efficiency innovations in our stores and trucking fleet, we plan to reduce our overall greenhouse gas emissions by 20 percent over the next eight years. We have implemented many programs and taken various steps to make our environmental goals a reality.

#### ***Environmentally-Friendly Products***

Environmentally-friendly products reduce costs and expand options for customers. We believe all families should have affordable access to sustainable products, like organic fruits and vegetables, fresh seafood, clothes made from organic cotton, and forest and paper products that are safe for families and are produced, packaged and delivered to our stores in an environmentally-friendly way. Customers should not have to make trade-offs when they purchase products at our stores.

As outlined below, Wal-Mart offers many options to its customers that promote sustainability.

- Recently, SAM'S CLUB introduced a yoga outfit made of organic cotton. It sold 190,000 units at 290 clubs in 10 weeks. Customers snapped it up and, as a result of this and other environmentally friendly products we sell, Wal-Mart is now the largest purchaser of organic cotton in the world.
- In February 2006, Wal-Mart announced plans to, within the next three to five years, purchase all of its wild-caught fresh and frozen fish for the North American market from Marine Stewardship Council (MSC)-certified fisheries. The MSC is a non-profit organization dedicated to promoting solutions to the problem of over-fishing. Products from MSC-certified fisheries carry a distinctive blue eco-label letting customers know the fish they will serve their families was harvested in a sustainable way.
- In November of last year, Wal-Mart took a major step to ensure that the company's imported shrimp are farmed with environmental sustainability in mind. Wal-Mart partnered with the Global Aquaculture Alliance (GAA) and Aquaculture Certification Council, Inc. (ACC) to certify that all foreign shrimp suppliers adhere to Best Aquaculture Practices (BAP) standards.
- Additionally, we are working with various suppliers to educate and inform our customers through newspaper ads featuring new products that are good for the environment - like compact fluorescent light bulbs and cold water detergents.

Wal-Mart can provide access to sustainable products for every community, every family and every individual we serve, regardless of their station in life.

### ***Using, Encouraging and Investing in Renewable Energy***

Increasing our energy efficiency not only reduces dependency on oil and saves money, it reduces greenhouse gas emissions. As part of its desire to restore balance to climate systems, reduce greenhouse gas emissions and save money for our customers, Wal-Mart is committed to the following:

- Aggressively investing approximately \$500 million annually in sustainable technologies and innovations.
- Reducing greenhouse gases at our existing stores, SAM'S CLUBs and Distribution Centers around the world by 20 percent over the next seven years.
- Aggressively pursuing regulatory and policy changes that will create incentives for utilities to invest in energy efficiency, to use low or no greenhouse gas sources of electricity, and to reduce barriers to integrating these sources into the power grid.
- Assisting in the design and support of a green company program in China, where Wal-Mart will show preference to those suppliers and their factories involved in such a program.
- Initiating a program here in the U.S. over the next 18 months that will show preference to suppliers who set their own goals and aggressively reduce their own emissions.

### ***Reducing Waste***

We intend to reach the point in the near future where there will be no dumpsters at our stores and no landfills with Wal-Mart throwaways. To do that, we must address packaging. We want to ensure that our goods come in the right size package and that the materials in that packaging are made from renewable or recyclable materials.

We are committed to:

- Reducing our solid waste from U.S. stores and clubs by 25 percent in the next three years.
- Working with suppliers to create less packaging overall, increase product packaging recycling and increase use of post-consumer material.
- Replacing some packaging of our private brands with alternatives that are more sustainable and recyclable within the next two years.

These solutions will build on the types of things we are already doing. For example, in November, we replaced our select produce packaging with corn-based (PLA) packaging on just four items - cut fruit, herbs, strawberries and Brussels sprouts. That change will save the equivalent of 800,000 gallons of gasoline and will prevent over 11 million pounds of greenhouse gas emissions from polluting our environment. We are currently testing PLA on everything from cake and donut boxes to bread bags and strawberry clam shells to deli trays and salad bowls.

In California, we recently announced the rollout of the Wal-Mart Kids Recycling Challenge, a private-public partnership that helps California elementary school students become responsible stewards of their environment while earning money for their schools. The Kids Recycling Challenge is the largest plastic bag recycling program of its kind ever undertaken in the state. Since its inception, more than 400 schools have participated, and have already recycled over 104 tons of plastic bags, earning more than \$116,000 for their schools.

Further, we have implemented a new process in some of our stores that is helping us recycle plastic that we used to throw away. Having all of our stores participate in this program will save us \$28 million per year. Finally, last year, Wal-Mart recycled 2.8 million tons of cardboard, 9,416 tons of plastic, 262 million aluminum cans, glass containers and plastic bottles and 49 million disposable cameras.

We believe that Wal-Mart can continue these kinds of efforts and significantly reduce the amount of waste going to landfills in our communities while reducing costs through increased recycling of the remaining material.

### ***Land Preservation***

In April 2005, Wal-Mart and the National Fish and Wildlife Foundation (NFWF) began the "Acres for America" partnership. The program preserves one acre of critical wildlife habitat for every acre Wal-Mart has developed and will develop for the next 10 years. To date, over 360,000 acres of wildlife habitat in Arizona, Arkansas, California, Idaho, Louisiana, Maine, Michigan and Oregon have been preserved.

### ***History of Better Buildings***

For more than a decade, Wal-Mart Stores has examined energy and environmental features in its buildings. Three stores in particular provided an initial examination as outlined below.

- Demonstration Store 1 in Lawrence, Kansas - Wood was chosen as the largest material source, since it could be reused or recycled. The store also has many energy-saving features, including a recycled asphalt parking lot.
- Demonstration Store 2 in Moore, Oklahoma - The energy and environmental "centerpiece" in this store is its futuristic heating, ventilation and air conditioning system that coordinates space conditioning and dehumidification, ventilation, indoor air quality, heat recovery and refrigeration with reduced energy use.
- Demonstration Store 3 in the City of Industry, California - In addition to utilizing all the best technologies from the above two demonstration stores, this store has three electric car-charging stations and 180 high-performance skylights.

### ***Stores and Distribution Centers***

As previously mentioned, our goal is to reduce greenhouse gases at our existing stores, clubs and distribution centers around the world by 20 percent over the next eight years and future stores will use 30 percent less energy and produce 30 percent fewer greenhouse gas

emissions than our 2005 design within the next three years. We believe these innovations will dramatically increase the value we bring to our products and communities.

Radically reducing the amount of electricity we use to run our business requires us to embrace change and think creatively about how we power our world. Our plan centers on retrofitting our existing stores with innovative power systems and building new stores with advanced energy effectiveness in mind.

As we have learned with our experimental stores, there is no one-size-fits-all solution. We are practicing with the energy systems of the future, such as high-performance light bulbs, wind power, solar energy, sky lighting, and even biofuel boilers. Further, we are working with top environmental groups and innovators to develop a set of measures that will hold us accountable for our goals. Once we have tested our innovations, we will share them with tens of thousands of vendors in our value chain, magnifying change on a global scale.

### ***The Experimental/Applied Practice Stores***

Wal-Mart has created two experimental or applied practice stores (one in McKinney, Texas and one in Aurora, Colorado) that highlight the way building owners, scientists, engineers, architects, contractors, and landscape designers can work together to create stores that save energy, conserve natural resources, and reduce pollution. These stores are living laboratories, testing experimental technologies and products.

Our foremost goal for the experimental stores was to focus on technologies and approaches that fit with our mission statement. Further, the goals for the experimental stores were to reduce the amount of energy and natural resources required to operate and maintain the stores, reduce the amount of raw materials needed to construct the facilities, and substitute, when appropriate, renewable materials. These goals served as the litmus test for every decision made about experimental technologies, products, and processes. Specifically, the experiments had to lead to a store design that improves the comfort of Wal-Mart associates, improves the ability to serve Wal-Mart customers, and reduces Wal-Mart's use of natural resources.

### ***The McKinney Experimental/Applied Practice Store***

Our Supercenter store in McKinney, Texas, uses revolutionary materials, technology, and processes to reduce the amounts of energy and natural resources required to operate the store. We are testing this store's sustainable practices with the intent to share them broadly, both internally and externally.

Not only does the Supercenter provide quality products and every day low prices, it has the potential to profoundly change the way the retail industry designs, constructs, and manages facilities as it relates to the environment. The store contains many of the best resource conservation and sustainable design technologies currently available to minimize the use of energy and natural resources.

The McKinney store experimented and continues to experiment with materials, technology, and processes, which include:

- Reducing the amounts of energy and natural resources required to operate and maintain the store;



- Reducing the amount of raw materials needed to construct the facility; and
- Substituting, when appropriate the amount of renewable materials used to construct and maintain the facility.

Wal-Mart wants to make the best use of renewable and alternate sources like wind and solar energy to generate electricity to supplement the power needs of the store. The store draws its energy first from on-site resources and systems, and then from conventional utility sources as a secondary service. For example, the waste cooking oil which had been used to fry chicken is recycled by mixing it with used automotive oil from the Tire and Lube Express to serve as fuel to heat the building. Additional steps we have taken in this store in support of our commitment to sustainability are outlined below.

- Climate Control - We are employing radical new ways to conserve energy from radiant floor heating to futuristic reflective paints.
- Internal Building Experiments - By reusing cooking and motor oil, we are saving enough energy to provide heat and hot water for an estimated 26 single family homes in McKinney for an entire year.
- Internal Lighting - By utilizing more efficient lighting sources, we will realize lighting savings near 300,000 kwh a year.
- Bioswale and Pervious Pavement - We utilize pervious pavement (which allows water to run through it) and bioswales are filtering our runoff water.
- Recycling - Recycling is about more than cans and bottles. We are learning about food waste, fly ash and volatile organic compounds, and looking into ways in which to use what we learn.
- Solar Energy - Solar panels on the store's façade are estimated to generate enough electricity to power up to 780 single-family homes for one day and reduce greenhouse emissions by 37,750 pounds per year.
- Water Conservation - Our rainwater harvesting and treatment system is expected to provide 95 percent of the water needed for irrigation on the site.
- Wind Turbine & Heat Island Effect - We have a new wind turbine and are experimenting with several types of shade structures for cooling cars and the parking lot surface.

Wal-Mart has contracted with the Oak Ridge National Laboratory to provide testing and analysis on store systems and materials, based on national scientific measurements and standards, for a period of three years. Sharing the results of the store's experiments with the rest of the retail and development industry could turn low-volume, rare technologies into industry standards. Wal-Mart hopes to learn new environmental conservation best management practices and benchmarks that will serve as future design standards in the retail industry when it comes to land development and building construction.

Our customers flocked to this store and the store manager is enjoying nearly 10 percent energy efficiency gains versus a “normal” Supercenter located a couple of miles down the road. While that is not enough to cover the cost of building the store, we are learning, and with our scale that will pay off as we introduce these technologies in new stores and clubs.

### ***The Aurora Experimental/Applied Practice Store***

Our Supercenter store in Aurora, Colorado is our second experimental/applied practice store. The store utilizes countless technologies and processes to minimize the use of energy and natural resources.

‘ This store has been labeled “The World’s Largest Recycling Project” in Colorado. More than 500 tons of material and concrete from Denver’s Stapleton Airport’s old runways were crushed up, recycled and used in the store’s foundation. The used vegetable oil from the store’s Deli and used motor oil from the store’s Tire and Lube Express will be burned to help heat the store.

Overall, the store will test over 50 different experiments to help Wal-Mart evaluate technologies that will help us our sustainability goals. Some of the key experiments include solar and wind power, waste oil boilers, porous pavements, radiant floor heating that will help keep pedestrian areas clear of snow, and unique fabric duct air systems to heat and cool the building efficiently. There will even be a tall grass prairie on site and a place to welcome RV visitors.

Finally, Wal-Mart has contracted with the National Renewable Energy Lab (NREL) of Golden, Colorado to provide monitoring, testing, and analysis on store systems and materials, based on national scientific measurements and standards, for a period of three years.

### ***New Prototype Stores***

In an effort to continue improving our sustainability commitment, Wal-Mart is actively working on several new generation prototype stores that will be 15 to 20 percent more efficient than our already, very efficient, experimental/applied practice stores discussed above. These new prototype stores will be very different than the experimental/applied practice stores.

Specifically, Supercenter stores are under construction in Rockton, Illinois, Kansas City, Missouri and Highland Village, Texas. All three of these Supercenters are identified as “HE” or high efficiency projects. They represent Wal-Mart’s first iteration towards a new, 30 percent higher efficiency prototype as outlined by our CEO, H. Lee Scott Jr. in an October 24th speech. This first iteration effort has a projected efficiency gain of 15 to 20 percent above Wal-Mart’s baseline 2005 prototype efficiency, which is already about 9 percent more efficient than current energy codes require. These stores will open for business sometime between the fourth quarter of 2006 and the first quarter of 2007.

Our next iteration of the HE pilot prototypes is in development and scheduled for opening sometime between the third quarter of 2007 and the fourth quarter of 2007. In fact, plans for one Supercenter store in this iteration are ready to be sent out-to-bid. These pilot prototypes will increase efficiency by 20 to 25 percent. Finally, our third iteration of the HE

pilot prototypes, scheduled to open sometime in the fourth quarter of 2008, will increase efficiency by 30 percent or more.

## **Awards and Recognition**

In June of this year, the Alliance to Save Energy (ASE) announced it will present its special Chairman's Award to Wal-Mart in September. The ASE, an organization created by Congress, promotes energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security.

As part of its Stars of Energy Efficiency Awards program, every year the ASE recognizes deserving companies and individuals for their outstanding commitment and contributions to energy efficiency. While the announcements were made in June, the awards will be presented at the ASE's annual black tie awards dinner on September 12, 2006 in Washington, DC.

This year Senator Mark Pryor (D-AK) will be presenting the Chairman's Award to Wal-Mart in recognition of Wal-Mart's commitment to energy efficiency and the environment and for its innovative corporate policy, strong leadership, and continued contribution to the cause of energy efficiency.

Additionally, Waste News, a leading news source about waste and environmental management, has named Wal-Mart the winner of the 2005 Waste News Environmental Award. According to Waste News editor Allan Gerlat, they chose Wal-Mart for this award because, in their judgment, it has made the most significant environmental progress of any business in 2005.

This is the first year Waste News has offered the Environmental Award. The Waste News editorial staff considered more than 50 nominations and some internally identified companies, before choosing Wal-Mart.

Waste News, a Crain Communications Inc. biweekly publication, is based in Akron, Ohio. It is the only industry newspaper that reports on all aspects of solid and hazardous waste management as well as air and water pollution, including businesses and organizations that generate waste and the recycling, disposal, collection, transportation and processing of waste.

## **Conclusion**

When it comes to running an international business in ways that nourish and support the environment, we all have a lot to learn. However, everyday Wal-Mart is learning new ways to become a better steward of the environment and we believe that through consistent and applied practice, we will improve our abilities, get better at new skills, and increase the value we create for our customers and the world at large. While we believe we have achieved a significant amount in regards to improving and maintaining our environment, we know there is more to do. We are committed to doing our part. Wal-Mart wants to be a leader in corporate responsibility for the environment and our shareholders.